



## Behavior Change Examples

1. La Jolla Shores Business District (San Diego)
2. Fish Consumption Education Collaborative (FCEC)
3. Dog poop (Oceanside)
4. Chuyen Que Minh (Vietnam)
5. Dirty Dairying (New Zealand)
6. Litter prevention (CA)
7. Busting the 3000 mile myth (CA Statewide)
8. Source reduction (tire maintenance)
  - Prompts (window sticker)
  - Barriers (pressure gauge)



## Think Blue: La Jolla

- San Diego Storm Water Pollution Prevention
- Priority area: Bacteria
- Hot spot region (La Jolla Cove, ASBS)
- Behavior selection
- Observations
  - Litter
  - Water in the gutters
  - Standing water in alleyways
- Commercial and residential





## Think Blue: La Jolla

- Behavior selection
  - Hosing at beach rental shops
  - Hosing storefronts by local merchants
  - Overwater landscaping
  - Restaurants hosing mats at closing
- Barriers
  - Surveys with merchants
  - Low group identity (social norms)
  - Familiar with code, but low motivation to comply



## Think Blue: La Jolla

- Intervention
  - In-person training by city staff (credibility)
  - Tailored positive behaviors (BMPs)
  - Leave-behind (prompts, reciprocity)
  - Window decal (commitment, social norms)
- Program lasted 18 months
- Evaluation observations
- Control region

## Think Blue: La Jolla



## Think Blue: La Jolla

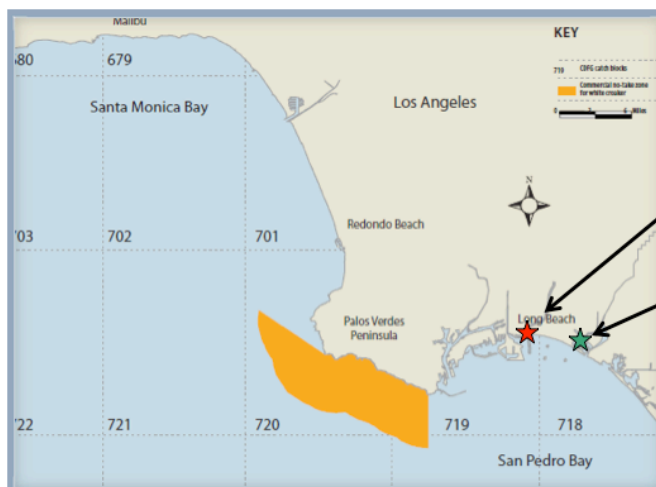
- Results after 1 year
- Water in the gutter: reduced by 67%
- Debris in the gutter: reduced by 77%
- Standing water: decreased by 85%
- Some behaviors did not change: litter, pet waste, puddles in alleys, wet pavement

## Angler Outreach (Palos Verdes)

- Palos Verdes Shelf Superfund site
- 17 square miles of ocean floor
- Sediment contaminated with PCB and DDT
- Health advisory for white croaker
- Baseline surveys with anglers



## Angler Outreach



Rainbow Harbor  
(Intervention Site)

Belmont  
(Control Site)

## Angler Outreach (Palos Verdes)

- Many familiar with health advisory (54%), but confused by complexity
- Only 51% could correctly identify white croaker
- 64% of anglers leave the pier with at least one white croaker
- Cultural and language diversity
- Vietnamese anglers particularly at risk



## Angler Outreach (Palos Verdes)

- **Barriers:** knowledge, culture, taste, subsistence
- **Motivators:** Health, especially for children and family

## Angler Outreach (Palos Verdes)

### ■ Intervention

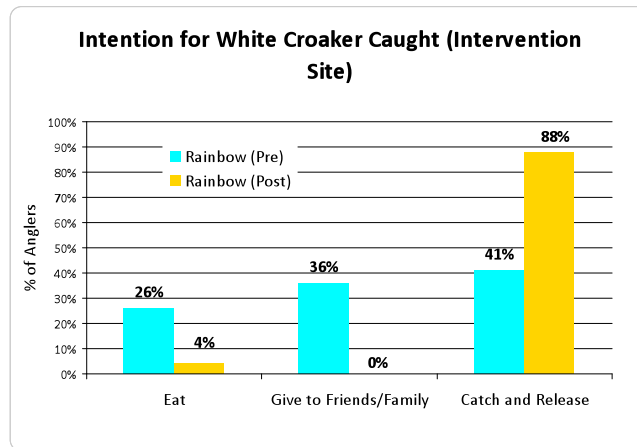
- Community workshop (Vietnamese)
- Printed card (featuring children and family)
- Fish identification tools
- In-person communications
- Local environmental NGO



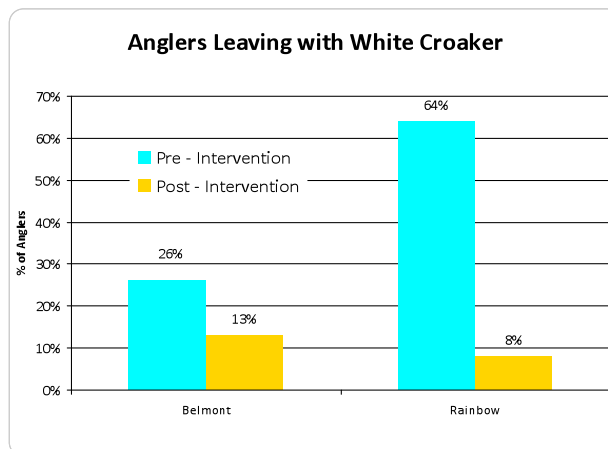
## Angler Outreach



## Angler Outreach



## Changing Behavior





## Your Dog: Your Duty

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- Walking trail in Oceanside, CA
- Observations showed large amount of accumulated pet waste
- Observations suggest trail used largely by residents
- Barriers survey. Postal mail survey of 300 residents living in the region with trail access
- Response rate: 65%



## Your Dog: Your Duty

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- Motivations for picking up dog waste
  - High ratings for overall importance of picking up dog waste
  - “Because it is the right thing to do” (top rated)
  - “Because it pollutes parks, rivers, and beaches”
- Barriers
  - 17% admit not always picking it up
  - “Forget to bring a bag” (top)
  - “Nowhere to throw it”
  - “No one is around to see” (anonymity)



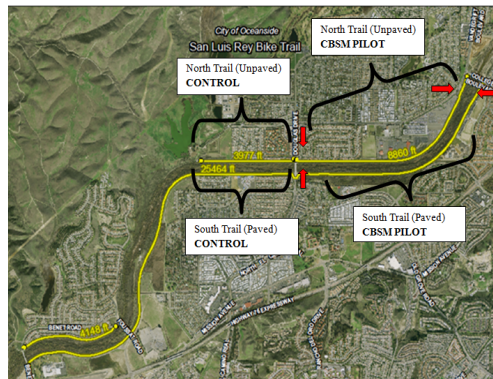
## Your Dog: Your Duty

- Structural intervention
  - Pet stations plus trash can and strategic locations
  - Clean up existing pet waste
- Motivational intervention
  - Branded signage



## Your Dog: Your Duty

- Pilot Test
- Pre-post on four segments of the trail



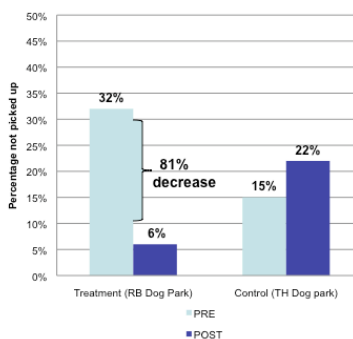
## Your Dog: Your Duty

- Change in accumulated pet litter (observed)
- 23% decrease in treatment area

	CBSM Pilot (College to Douglas)	Control (Douglas to Whalen)
<b>COMBINED</b>		
PRE	167	106
POST	128	101
% Change	23% decrease	<1% decrease

## Dog Parks and Dog Beach

- San Diego CBSM Pilot Project
- Observed dog owners and dogs “in the act”
- 81% reduction in dog park area





## Busting the 3000 Mile Myth

- Source reduction of motor oil
- Telephone survey of CA residents (1003 car owners/lease)
  - 73% change their oil more often than recommended by the manufacturer
  - Correlates of frequent changers:
    - Female, older, “normal” drivers, imported car, use a professional (not DIY), have a window sticker



## Busting the 3000 Mile Myth

- Focus groups
- One rural, one urban
- Barriers to going longer between oil changes
  - Engine wear. (also important was reduced fuel efficiency)
- Motivators
  - Saving time, saving money, help the environment
- Also pilot tested some tag lines and creative
- **STOP.**



## Intervention

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- Public service radio announcements (PSAs)
- Developed and aired through Ogilvy Worldwide
- Wanted peripheral route credibility (radio)
- Website development and promotion
- Key barriers: engine wear and fuel efficiency
- Key motivators: save money, time, and environment
- Try not to alienate car enthusiasts or automotive industry
- **PLAY SPOT**

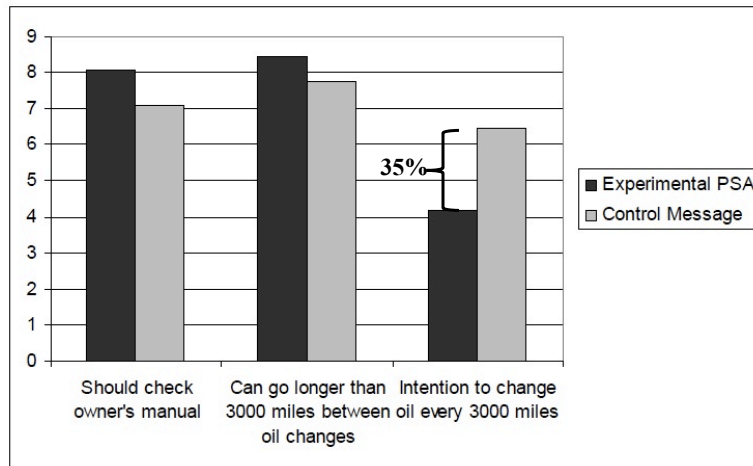


## Debunked

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- Field tested in experiment with 60 residents of San Diego
- Tested at busy retail locations
- Experimental message or control (*Share the Road*)
- After listening to *Debunked*, motorists were 35% more likely to go longer than 3000 miles before next oil change

## Debunked



## References

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